## ABSTRACT OF THE DISCLOSURE

An optical fiber fixing device has a V-grooved block, a clamp mechanism, a stopper mechanism, a sensor, a motor, an operator section and a controller. The V-grooved block has a top surface formed with a V-groove to support an optical fiber thereon. The clamp mechanism has a clamp portion to fix the optical fiber on the V-grooved block. The stopper mechanism retains the clamp mechanism before the clamp portion is brought into contact with the optical fiber. The sensor outputs a detection signal to the controller upon detection of the clamp mechanism being brought into contact with the stopper mechanism. Upon receipt of that signal, the controller drives the motor to lower the stopper mechanism. In sequential operation with downward movement of the stopper mechanism, the clamp portion presses the optical fiber against the V-groove to fix the optical fiber in place between the clamp portion and the V-grooved block.